SPECIFICATION AMENDMENTS

Please replace the paragraph between page 15, line 24 and page 16, line 7 with the following amended paragraph:

In the temperature interval, a nitrogen radical formed by the gas discharge reacts very efficiently with an oxygen molecule (O_2), forming NO. A decomposition reaction of the NO with an oxygen radical, forming NO_2, only takes place to a minor extent in this case, as a result of the comparatively high gas temperature T_1. The upper limit temperature for the gas discharge is selected on the basis of ~~T1 = 800°C~~ $T_1 \leq 800°C$ in such a way that thermal NO production is avoided. Due to the involvement of oxygen radicals, such thermal NO production is associated with an extreme load on the reactor material.

Please replace the paragraph between lines 1 and 14 on page 17 with the following amended paragraph:

~~sThe~~ The reactor 5 and the converter 9 are used to enrich the process gas B to a high NO concentration C^*_{NO}, which exceeds values (< 200 ppm) required for a medical application by several times. A branch line 11 is thus provided, which bridges the reactor 5 and the converter 9 and through which the highly enriched process gas B is diluted back, in terms of the NO content, by adding untreated process gas B. The

addition of the untreated, and thus cold, process gas B at the same time further cools down the diluted-back process gas B in comparison with the highly enriched process gas B. The branch line 11 is provided with a mass-flow controller 12 in order to set a defined addition proportion. A valve which can be operated manually may also be provided, as a cost-effective alternative to this mass-flow controller 12.

Please replace the paragraph between page 17, line 16 and page 18, line 4 with the following amended paragraph:

The diluted-back process gas B flows through a nonreturn valve 13 (which opens in the flow direction S) into a preferably flexible line 14, that connects the apparatus 1 to an interface to a patient (for example a breathing mask M or an oxygen tent T). It is possible to further condition the diluted process gas B in a tee 15, which is disposed in the line 14, by adding air, oxygen, etc. through a supply line 16. An outlet filter 17 disposed downstream of the tee prevents NO_2 (which is formed in the meantime by a reaction of NO with O_2) from reaching the patient. This filter may contain known NO_2 absorbers such as NOXON, breathing lime, SODALIME, or SODASORB. The process gas B which is cleaned through the use of the outlet filter 17 is supplied to the patient as inhalation gas.